Maintenance of Supplies and Equipment

Army Modification Program

Headquarters
Department of the Army
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UNCLASSIFIED

SUMMARY of CHANGE

AR 750-10 Army Modification Program

This regulation revises policy relating to the modification of Army equipment. Specifically, this revision

- o Provides responsibilities and policies for modification of Army equipment (para 1-4, chap 2, and chap 4).
- o Provides definitions of modification terms (para 1-4, chap 1, and chap 3).
- o Establishes when an Engineering Change Proposal is to be used and at what point the Engineering Change Proposal needs to be developed into a Modification Work Order (MWO) (para 3-1).
- o States that commanders will not allow their equipment to be modified unless there is an official MWO (para 3-1).
- o Establishes the Army Modification Program objective that Army-owned equipment be kept safe and be in the latest configuration (para 3-1).
- o Describes modernization through spares (para 3-6).
- o Establishes financial obligations in the procurement and application of equipment modification (para 3-9).
- o Establishes the required level of centralized management within Army to accomplish the equipment modernization program (para 4-2).
- o Requires the major subordinate command's MWO coordinator to assign a materiel change number (para 4-2).
- o Describes the modification process (para 4-2).
- o Requires a major subordinate command (MSC) MWO Fielding Review Panel, chaired by the MSC MWO coordinator, review each MWO before its application (para 4-2).
- o Establishes the Modification Management Information System as the information system that will receive and track modification information for the Army, thus providing the latest configuration down to the Unit Identification Code and serial number level (chap 5).
- o Covers modification of multiservice equipment and systems (chap 6).

Effective 8 September 2000

Maintenance of Supplies and Equipment

Army Modification Program

By Order of the Secretary of the Army:

ERIC K. SHINSEKI General, United States Army Chief of Staff

Official:

JOEL B. HUDSON Administrative Assistant to the Secretary of the Army

History. This printing publishes a revision of this publication.

Summary. This regulation establishes policy and procedures and outlines the organizational structure for the Army Modification Program.

Applicability. This regulation applies to the Active Army, the Army National

Guard of the United States, the U.S. Army Reserve, and civilian components. The policy in this regulation is applicable during full mobilization.

Proponent and exception authority. The proponent of this regulation is the Deputy Chief of Staff for Logistics (DCSLOG). The DCSLOG has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation. The DCSLOG may delegate this approval authority, in writing, to an individual within the proponent agency in the grade of colonel or the civilian equivalent.

Army management control process. This regulation is subject to the requirements of AR 11-2. It contains management control provisions. Checklists for conducting internal control reviews are included in Appendix E.

Supplementation. Supplementation of this regulation is prohibited without prior

approval from HQDA (DALO-SMM), Washington, DC 20310-0500.

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Department of the Army, Office of the Deputy Chief of Staff for Logistics (DALO-SMM), 500 Army Pentagon, Washington, DC 20310-0500.

Distribution. Distribution of this publication is available in electronic media only and is intended for command level A, for Active Army, Army National Guard of the United States, and U.S. Army Reserve.

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^{*}This regulation supersedes AR 750-10, 1 July 1984.

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Chapter 1 Introduction

1-1. Purpose

This regulation provides a disciplined approach to plan, authorize, control, implement, and track hardware and software modifications made to Army materiel.

1-2. References

Required and related publications and referenced forms are listed in Appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and terms used in this regulation are explained in the glossary.

1-4. Policies for modification of materiel

- a. This regulation implements Army policy on modifications to Army equipment and is based on DOD 5000 and 7000-series publications.
- b. Modification is the alteration, conversion, or modernization of an end item, which changes or improves the original purpose or operational capacity in relation to effectiveness, efficiency, reliability, or safety of that item. This includes conversions, field fixes, retrofits, remanufactures, redesigns, upgrades, extended service programs, engineering changes, software revisions, System Enhancement Program (SEP), Service Life Extension Program (SLEP), System Improvement Program (SIP), Product Improvement Program (PIP), preplanned product improvement (P3I), horizontal technology integration (HTI), modernization through spares (MTS), technology insertions, and all other terms used to describe modifications as defined above.
 - c. Hardware modifications:
- (1) When a system is in production and no equipment has been fielded and DD Form 250 (Materiel Inspection and Receiving Report) has not been signed, modifications are applied using engineering change proposals (ECPs), and technical data packages (TDPs) are updated.
- (2) When a system is in production and has had an initial fielding of equipment to units and DD Form 250 has been signed, modifications are applied as follows:
 - (a) ECPs will be used to modify equipment that is on the production line or is still at the production facility.
 - (b) ECPs will be converted into MWOs for application to fielded equipment.
- (3) When a system is out of production and fielded and DD Form 250 has been signed, modifications are applied using the MWO. All ECPs must be developed into MWOs for application to these systems.
- (4) If an item is to be modified using an MTS effort, it must comply with the MTS rules as described in paragraph 3-6.
 - d. Software modifications:
- (1) When a system is in production (DD Form 250 has not been signed.) and has had no fielding of the associated software to units (excluding field exercises or testbeds); or, when a software system has no specially produced hardware, modifications are applied using ECPs, and TDPs are updated.
- (2) When a system is in production and has had an initial fielding of the hardware (DD Form 250 has been signed.) and software, modifications will be applied as follows:
- (a) ECPs will be used to modify the software, and all evolving versions of the software that are undergoing continuing corrective or adaptive revision (for corrected or enhanced future capabilities), for application to systems still on the production line or still at the production facility.
 - (b) Software ECPs will be converted into software change packages (SCPs) for application to fielded equipment.
- (3) When a system is out of production and fielded and DD Form 250 has been signed, software modifications are applied using SCPs. Any SCP that requires or coincides with a hardware modification must be developed into the hardware MWO for application to these systems.
- e. When a single MWO or a group of concurrent MWOs are combined and applied as a block package, and these modifications exceed the operational requirements document (ORD) and/or the Mission Essential Needs Statement (MENS) of the end item, the end item will be covered under the rules of the Army Materiel Release Program. (See AR 700-142.) As part of the materiel release process, the MWO and the MWO Fielding Plan (MWOFP) will become an annex in the materiel release package.
- (1) If a modification such as a conversion, remanufacture, ESP, SIP, PIP, or P3I changes the operational capabilities of the weapon system and changes the Army model number or nomenclature, that item will, at a minimum, be identified by a new national stock number (NSN). Changes in the operational characteristics require a new standard study be performed.
- (2) Because of budgetary defense, if the requirement for a materiel release is established, the preferred method would be to establish a new line item number (LIN).
 - (3) All other modifications will require a change to the item's NSN.

- f. MWO execution management will be implemented by the MSC commander, through the designated MWO coordinator, for systems under U.S. Army Materiel Command (USAMC). For all other systems, the program executive office (PEO) will implement MWO management in coordination with the MSC MWO coordinator. Appropriate elements or directorates of the materiel developer (MATDEV), contractor, supporting commands, or activities will be tasked to schedule and execute the Modification Application Program.
- g. Funding, scheduling, planning, and application of MWOs will be a coordinated effort between the MATDEV and the MSC MWO coordinator to complete the modification on time at the optimum cost.
- h. A master Memorandum of Agreement (MOA) will be negotiated and completed (biennially) at the MACOM level between USAMC and the MACOMs. (See app C.)
- i. The validation/verification of the MWO is the responsibility of the MATDEV. Validation/verification of procedures, logistics support, and draft procedures for changed/revised publications will be conducted to ensure any modification achieves the stated goals prior to release of draft MWO for publication.
 - j. Commercial non-developmental item administrative use vehicles are excluded from the modification program.

Chapter 2 Responsibilities

2-1. Deputy Chief of Staff for Logistics (DCSLOG)

The DCSLOG will

- a. Serve as proponent for the Army modification program.
- b. Develop and promulgate modification policies and procedures.
- c. Validate requirements for the modification program.
- d. Participate in the semiannual Army modification panel.

2-2. Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT))

The ASA(ALT) will

- a. Program and budget funds for the execution of the modification program.
- b. Participate in the semiannual Army modification panel.

2-3. Assistant Secretary of the Army for Financial Management and Comptroller (ASA(FMC))

The ASA(FMC) will

- a. Manage the Planning, Programming, Budgeting and Execution System (PPBES) for modification efforts.
- b. Program and budget for modification funding together with ASA(ALT), ODCSOPS, and ODCSLOG .
- c. Prepare budget justification materials, control and distribute funds, and monitor execution.

2-4. Deputy Chief of Staff for Operations and Plans (DCSOPS)

The DCSOPS will

- a. Determine the requirements for the modification program.
- b. Participate in the semiannual Army modification panel.
- c. Prepare budget submission priorities.
- d. Prioritize and approve acquisition category (ACAT) I- and II-level modifications and any modification purchased by procurement appropriations for an end item costing more than \$300M for research, development, testing, and evaluation (RDTE) or \$1B in life cycle cost, as described in DA PAM 70-3.
 - e. Provide primary funding for the Modification Management Information System (MMIS).

2-5. Materiel Developer

The materiel developer will

- a. Coordinate recommended modifications that impact form, fit, function, electromagnetic characteristics, safety, and logistics supportability with combat developer, training developer (training aids, devices, simulations, and simulators (TADSS)), and the Army Safety Center for approval and prioritization or recommendation to ODCSOPS for approval and prioritization in accordance with DA PAM 70-3. Determine the types of modifications.
- b. Convene a Configuration Control Board (CCB), which will review the modification and, if approved, ensure that the MSC MWO coordinator has assigned a material change number (MCN). This will then be the authorization for the publication control officer to assign a valid MWO number. Both the MCN and MWO number will then be recorded in the MMIS, and the MATDEV's MWO database.
- c. Oversee any modification effort that results in a materiel release process (See AR 700-142.), when an MWO or a group of concurrent MWOs are applied as a block package, and these modifications exceed the ORD and/or the MENS

of the end item. As part of the materiel release process, the MWO and the MWOFP will become an annex in the materiel release package.

- d. Develop, apply, and record application of all modifications per this regulation.
- e. Plan, program, and execute modifications, including modifications to supporting fielded and developing TADSS and spares, using procedures defined in paragraph 4-2 of this regulation.
- f. Program/budget for the modification process according to DOD 7000.14-R, AR 37-1, and appendix E of AR 37-100 series (current fiscal year).
 - (1) Fund modification applications.
- (2) Submit budget requirements. For MATDEVs under PEO control, requirements will be sent through ASA(ALT) to DA DCSOPS. For AMC MATDEVs, requirements will be sent through USAMC to DA DCSOPS.
 - (3) Monitor, control, and evaluate overall funding execution activity, including end-of-year closeout responsibilities.
- g. Oversee life cycle configuration management of assigned system to include programming for acquisition of modification kits in sufficient quantities to modify all serial numbers within the serial number range of the MWO. This includes electronically recording completion of MWOs by serial number of item and maintaining this data in a configuration management database.
- h. Ensure modification planning and programming address total funding procurement appropriations (PA), RDTE, operational maintenance appropriations (OMA), single stock fund (SSF), and so forth, and scheduling from research and development (RD) through kit application, including electronic reporting. (Completion of the MWO application and reporting, even if no kits are required, is mandatory.)
- *i.* For systems that have transitioned to post production software support (PPSS), the designated Software Engineering Center (SEC) assumes responsibilities of the MATDEV.
 - j. Manage special mission modifications, component modernization, and minor alterations per this regulation.
- k. Provide funding for shipment of equipment and software to and from normal modification sites. However, if the MWO kits are to be applied at locations other than the normal sites, additional funding for shipment must be provided.
- *l.* Present all MWOs, their respective logistics support and application plans, to the MWO Fielding Review Panel for certification before subsequent release to the field for application.
 - m. Prepare and negotiate MWOFP with MACOM-designated organizations.
- n. For systems/items mounted or installed on other MATDEV platforms (associated items of equipment), coordinate with the primary systems MATDEV and ensure that these modifications will perform their intended functions on the primary system during the validation/verification phase. Application of these MWOs will be accomplished using the block modification process to the fullest extent, thus minimizing manpower/resource requirements and equipment downtime. The MATDEV developing the modification will apply and electronically record installation of the MWO, providing a copy (within 7 working days) of this information to the primary platform systems MATDEV.
- o. Attend the AMC-chaired annual modification coordination workshops (CONUS/Pacific and USAREUR), as appropriate.
- p. Record the nine data elements, as listed in paragraph 5-2 a for all MWOs. These data elements will be maintained and provided to the MMIS in accessible electronic database format.
 - q. Coordinate modification of multiservice equipment and systems with other Services.
- r. Coordinate embedded diagnostic strategy with program manager test, measurement, and diagnostic equipment (TMDE).
 - s. Ensure that TMDE is concurrently modified.

2-6. The Commanding General, Army Materiel Command

The Commanding General, AMC, will

- a. Serve as Army lead for the Army Modification Program.
- b. Chair annual modification coordination workshops (CONUS/Pacific and USAREUR).
- c. Participate in the semiannual Army modification panel.
- d. Ensure that each MSC has an MSC MWO coordinator, charted by the MSC commander, to serve as focal point for all MSC MWO efforts.
- e. Ensure that each SEC has a software ECP/SCP coordinator, charted by the SEC commander, to serve as focal point for all software modification efforts.
- f. Ensure that there is a current signed Memorandum of Understanding (MOU) with each applicable major Army command. (See app C.)

2-7. Commanders of major Army commands

The MACOM commanders will

- a. Designate an organization/individual as the MACOM MWO coordinator.
- b. Provide representation at the appropriate annual modification coordination workshops (CONUS/Pacific and USAREUR).

- c. Ensure that each post, camp, and station appoints an installation MWO coordinator.
- d. If applicable, ensure that there is a current signed MOU with USAMC. (See app C.)

2-8. The Commanding General, Training and Doctrine Command

The CG, Training and Doctrine Command (TRADOC), will

- a. Assist the MATDEV with the evaluation of modification recommendations and recommend either a materiel or non-materiel solution.
 - b. Provide representation at the annual modification coordination workshops (CONUS/Pacific).
 - c. Approve and prioritize ACAT III- and IV-level modifications.
 - d. Participate in the semiannual Army modification panel.

Chapter 3 Modification Program

3-1. Program overview

- a. The Army's Modification Program is the method by which changes are made to end items and weapons and information systems. Modifications may result from one or more of the following:
 - (1) Technology changes.
 - (2) Safety issuesSafety of Use Message (SOUM). (See AR 750-6, AR 95-1, AR 385-16.)
 - (3) New/improved capabilities.
 - (4) Operational changes.
 - (5) Software adaptations, corrections, or enhancements.
 - (6) Improved TMDE/testing capabilities.
 - (7) Corrections of equipment deficiencies/shortfalls.
 - (8) Product changes.
 - (9) Conversions.
 - (10) Validated user requirements.
 - (11) Improved reliability, availability, and maintainability (RAM).
 - (12) Reduced logistic support through cost reduction and value engineering.
 - (13) Simplification or standardization.
 - (14) Permit use with new equipment.
 - (15) Obsolescence.
- b. The modification program is the coordinated process the Army uses to develop, apply, and document changes in both hardware and softwareto Army equipment.
- c. When a modification is developed for an item, that modification must be identified against an end item's standard study number (SSN), LIN, NSN, Army part number, and end item serial number.
- d. Changes may occur while the item is under development in a factory environment, while under operational testing/developmental testing (OT/DT) at test sites, and after the fielding of the item. Prior to fielding, changes are normally documented to the TDP through ECPs. If the item is still being produced, but some of the items are already fielded (DD Form 250 has been signed.), and the need exists to modify the fielded items outside the production area, a formal MWO must be developed for the fielded items. MWO kits are purchased and applied to fielded items, and the changes will be incorporated into the appropriate technical manuals (TMs) and software-users guides/software-users manuals (SUGs/SUMs).
- e. No MWO is authorized for application unless it has an approved MWO number that is the product of the MWO process in paragraph 4-2. Commanders will not allow their equipment to be modified unless there is an official MWO.
- f. MWO kits and applications are at no cost to the user per statutory requirements as laid out in Title 31, United States Code, and interpreted in FMR 7000-14R.
 - g. Units will not requisition MWO kits based on the MWO itself without prior approval of the MATDEV.
 - h. All MWO applications must be reported electronically to the MATDEV and the MMIS.
- *i.* End item conversion programs that establish a new NSN/model designator will be fielded under the provisions of the Army Materiel Release Program (AR 700-142). The MWO and MWOFP will be developed as an appendix to the end item materiel fielding plan.
- *j.* If an item becomes unserviceable, units will not intentionally degrade these items by de-modifying through installation of serviceable unmodified repair items, either obtained through the normal supply system or obtained from DRMO.

3-2. Engineering Change Proposals

- a. An ECP is the management tool used to propose a configuration change to an end item. ECPs document proposed changes in the requirements or design of an item, provide a mechanism for coordination of the proposed changes, and provide a mechanism to disseminate the change upon approval. The ECP process is documented in MIL-HDBK-61 and the format for an ECP is in MIL-STD-2549. ECPs are applied to equipment during the production phase. If there is a need or the decision is made to apply the ECP to fielded equipment, an ECP must be developed into an MWO for hardware/software application or into an SCP for a software-only application.
 - b. There are two types of ECPs as referenced in MIL-STD-2549 and MIL-HDBK-61. They are:
- (1) Class I ECP. A Class I ECP is approved by the Configuration Control Board and authorized with a contract modification. Class I ECPs are assigned an engineering change priority (emergency, urgent, routine), which determines the relative speed at which the ECP is to be reviewed, evaluated, and, if approved, ordered and implemented.
- (2) Class II ECP. A Class II ECP is typically reviewed for concurrence in classification and approved by the MATDEV, unless otherwise specified in the contract.

3-3. Minor alterations (hardware only)

- a. Minor alterations cannot be mandatory for organizational or field support level application and reporting; but they are mandatory for application to depot serviceable assets before issue to user. Minor alterations will be scheduled concurrently with programmed depot maintenance on unserviceable reparable assets. Example is a flashing light installed on a vehicle to lead a convoy.
 - b. Application done by the user on items located with the user will be at the user's expense.
 - c. To qualify as a minor alteration, the proposed change must
 - (1) Be optional for field application and reporting by user.
- (2) Not exceed 4 man-hours (bench time) when performed separately or concurrently with other maintenance actions.
 - (3) Be cost effective.
- (4) Ensure parts, components, tools, special tools, fixtures, or skills (Military Occupational Specialty) are available in using units or are provided by MATDEV.
- (5) Result in change to all technical documentation (TMs, depot maintenance work requirement (DMWR), TDP, and so forth) and applicable procurement request order numbers (PRONs) for overhaul, rebuild, remanufacture, or repair at depot facilities.
- (6) Be authorized in equipment publications and in the DMWR. It may be authorized by the MATDEV in the proper Equipment Improvement Report (EIR) and Maintenance Digest Technical Bulletin (TB) and will be incorporated in the next revision/update to the publications.

3-4. Component modernization

Component modernization by normal replenishment requisitioning. This process will be used when

- a. The failure rate does not justify an immediate purge of retail stocks.
- b. An improved item can be issued through normal supply procedures.
- c. The user need not make application and report.
- d. The improved item can be installed when the old item on fielded equipment fails.
- e. Form, fit, or function is not changed.
- f. Related technical publications are revised/updated.
- g. The application performed by the user is done at the user's expense.
- h. Funding will be in accordance with AR 710-1.
- i. The improved component's NSN is changed.

3-5. Modification Work Orders (MWOs)

- a. Mandatory MWOs are developed to achieve one or more of the following objectives:
- (1) Provide new or improved capabilities.
- (2) Improve reliability and maintainability.
- (3) Improve or correct faulty performance or product quality.
- (4) Reduce logistical support requirements.
- (5) Simplify or standardize equipment.
- (6) Permit use with new equipment.
- (7) Prevent injury to personnel and damage to equipment.
- (8) Meet environmental protection standards.
- (9) Implement SOUM.
- b. Mandatory modifications will be classified as "emergency," "urgent," or "routine," according to this regulation.

- (1) Emergency MWOs. Emergency MWOs have the highest priority in the modification program and will immediately deadline all equipment affected until stated deficiencies are corrected or the risk of communications security or cryptographic compromise is reduced to an acceptable level. An MWO will be classified "emergency" when the MWO is needed to
- (a) Correct a hazardous condition that could result in fatal or serious injury to personnel or in extensive damage or destruction of equipment. A hazardous condition requires a System Safety Risk Assessment per AR 385-16.
- (b) Change operational characteristics that, if not accomplished without delay, may seriously compromise national security.
- (c) Prevent operation of equipment with an unapplied emergency MWO. The MATDEV will proceed with the utmost urgency to apply any emergency MWO. Such equipment will be reported as not mission capable (NMC) according to DA PAM 738-750, DA PAM 738-751, AR 220-1, and AR 700-138. Emergency safety-related MWOs and deadlining or grounding of equipment is usually preceded by a SOUM or Safety of Flight Message in accordance with AR 750-6 or AR 95-1, respectively. There may be an emergency MWO that does not require a safety message. This type of MWO would correct an operational deficiency (war fighting). The level of urgency for this type of MWO is approved by ODCSOPS.
- (2) *Urgent MWOs*. Urgent MWOs have the second highest priority and must be applied within 2 years of the MWO effective date. An urgent priority is assigned to a modification for any of the following reasons:
- (a) To correct a potentially hazardous condition, which if left uncorrected could result in injury to personnel or damage to equipment. A potentially hazardous condition requires a system safety risk assessment per AR 385-16.
- (b) To cause a change that, if not accomplished expeditiously, may seriously compromise the mission effectiveness of deployed equipment, software, or forces.
- (c) The equipment may continue to be operated under restrictions determined by the MATDEV. Equipment not modified 2 years from the effective date of the MWO will be reported as NMC according to DA PAM 738-750, DA PAM 738-751, AR 220-1, and AR 700-138. Urgent safety-related MWOs and deadlining or grounding of equipment may be preceded by a SOUM or Safety of Flight Message in accordance with AR 750-6 or AR 951, respectively, but is not required. This type of MWO would correct an operational deficiency (war fighting). The level of urgency of this type MWO is approved by ODCSOPS.
- (3) Routine MWOs. A modification will be classified as routine when emergency or urgent priorities are not applicable.
 - (a) Application of all routine MWOs will be completed within 4 years of the effective date of the MWO.
- (b) Equipment not modified 4 years from the effective date of the MWO will be reported as NMC according to DA PAM 738-750, DA PAM 738-751, AR 220-1, and AR 700-138 (applicable only to routine MWOs published after the publication date of this AR). Exceptions to the 4-year limit will be approved by HQDA, DALO-SMM, prior to publishing the MWO. Equipment having unapplied routine MWOs after the assigned completion date will be reported to the MATDEV through command channels within 45 days of the published completion date.
- c. When the MATDEV applies a mandatory MWO, the MATDEV must concurrently modify all spares. Retail-level spares, PLL, and authorized stockage list (ASL) must be modified as the MWO is applied to the organization. Depotlevel spares must be modified proportionally to coincide with the modification of all fielded assets.
- d. When required, supporting test, measurement, and TMDE must be modified concurrently with the end item of equipment and material being modified. This includes equipment and test program spares and test program sets (TPS) required to diagnose and repair modified items.
- e. When MWOs are applied to automated data processing (ADP) equipment, provisions must be made to ensure that associated software is not rendered obsolete by the ADP hardware modifications.
- f. All supporting TADSS must be modified concurrently with the end item of equipment and materiel or software being modified.

3-6. Modernization through spares (MTS)

- a. MTS is an acquisition strategy for spares to be applied throughout the materiel acquisition cycle to maintain readiness, modernize equipment, and reduce total ownership costs. It is based on technology insertion and the use of state-of-the-art commercial products, processes, and practices to extend a system's useful life in an economical manner.
- b. Any modernization efforts that meet the requirements in c or d below can be considered for MTS and may be incorporated during the normal maintenance/repair process. Modernization efforts that do not meet the requirements in c or d below must be applied using the MWO procedures.
 - c. An item modernized through the MTS process must
 - (1) Be two-way compatible or interchangeable with the original item it replaces.
 - (2) Be issued and supported within the normal supply system.
- (3) Be documented in accordance with interchangeability and substitutability (IS) family structures and coding in accordance with USAMC-R 700-30. Cataloging will be in accordance with AR 708-1.
 - d. An item modernized through the MTS process does not

- (1) Require additional repair at or below GS/DS level, except for minor changes in maintenance procedures.
- (2) Require revised, new, or special TMDE.
- (3) Require changes in system software beyond the scope of necessary documentation consistent with two-way hardware interchangeability noted in b, above.
- (4) Intentionally increase the operational capability of the end item of equipment to be modified. Incidental improvements obtained as a result of MTS are permitted.

3-7. Software modificationsPost Production Software Support (PPSS)

- a. Software modifications may be applied by
- (1) SCP.
- (2) Software revisions.
- (3) Software updates.
- (4) MWOs.
- b. Software modifications that require modification of the hardware will be applied as an MWO.
- c. When a software modification is applied, the operator, organization, and unit must be able to identify what version or type of software is installed on their systems. Approved ways of identifying version/type of software installed are as follows:
- (1) The software will be self-reporting. When the system is turned on, the operator will see on the display what version or type of software is operating on the system.
- (2) The hardware item will be identified by a new NSN or by clear and distinguishing markings as to what version or type software is applied to the system.
- d. The MATDEV reports a current listing of software changes or versions to the MMIS, in accordance with paragraph 5-2.

3-8. Alternate changes to equipment. These changes are:

- a. Special mission modification of materiel.
- (1) A special mission modification is a change to fielded equipment that is designed to assist the commander in accomplishing a special mission.
- (2) Requests for approval of a special mission modification of equipment must be sent to the MATDEV. (This includes COMSEC and EW/SIGINT equipment.) To qualify as a special mission, a change must
 - (a) Be temporary (or later approved for permanent application).
- (b) Be easily removed by field support personnel to return the equipment or software to its standard design before evacuation, transfer to another command, or upon completion of the special mission.
 - (c) Not require changing technical documentation such as DMWR, TDP, or TMs.
 - (d) Apply only to a limited quantity of total U.S. Army inventory.
 - (3) Applications of special mission modifications will be reported to the appropriate MATDEV.
- (4) The requesting command is responsible for total funding including engineering, testing, evaluation, special mission modification kits, logistical support, training, training devices, TMDE, installation of kits, maintenance, removal of kits, and so forth. The following are included in the special mission modification request to the MATDEV:
 - (a) Equipment description.
 - (b) Purpose and justification.
 - (c) Drawing and technical description of the modification.
 - (d) Proposed date for installation.
 - (e) Estimated time when equipment will be restored to standard design.
- (5) Before approval, the sponsor of the special mission modification will analyze the proposed change to determine engineering feasibility and the total cost. The sponsor of the special mission modification will also ensure that equipment reliability or personnel safety is not affected adversely. Exceptions to this must be approved by HQDA (DALO-SMM). For aircraft, the MATDEV will certify the special mission modification and issue an airworthiness release to the requesting unit or activity on approval of application of the modification.
- (6) An aircraft will not be changed by an alteration without approval of U.S. Army Aviation and Missile Command (AMCOM) in coordination with HQDA (DALO-AMV). Unauthorized alterations include, but are not limited to, all important person configurations, additions or changes in bulkheads, windows, autopilots, distance-measuring equipment, air conditioners, radar, altimeters, flight control, navigational and weapon and sensor system software.
- (7) Commercial-manufacturer-approved auxiliary/accessory items are authorized in adapting commercial equipment to handicapped personnel requirements.
- (8) Commercial-type vehicles, when used solely for facilities engineering, may be modified at the local level. Examples are mounting sprayers, foggers, compressors, generators, and other equipment and items used to perform real property maintenance activities. Vehicles will be returned to their original configuration when evacuated, transferred, or

when need for special mission modification ends. Vehicles being salvaged need not be returned to original configuration.

- (9) Policy, responsibilities, and procedures for application or removal of special mission modification must be included in TBs and TMs.
 - b. Special purpose modification of materiel.
- (1) These modifications must meet climactic, geographic, or equipment interface requirements. Examples are winterization kits, weapon mounting kits, tie down kits, radio/TV frequency-interference-shielding kits, telemetry kits, distribution panel, and auxiliary kits or accessories that are accountable items and authorized by table of organization and equipment (TOE) or modification table of organization and equipment (MTOE). When authorized, this equipment will be issued through normal supply procedures. Instructions of installation, operation, maintenance, and removal of these kits will be included in the technical publications or in the TB of the affected equipment.
- (2) Funding for special purpose modifications will be provided by the requesting command unless directed by HQDA to be programmed and budgeted under provisions of DOD 7000.14R, AR 37-1, and AR 37-100 series (current fiscal year).
- (3) COMSEC EW/SIGINT equipment that is type-classified "standard" and is used in INSCOM fixed field stations will be returned to its original design when evaluation or need ends.
 - (4) Special purpose modifications will be reported electronically to the appropriate MATDEV.

3-9. Modification funding

The funding of MWOs is based upon guidance in DOD 7000.14-R and DFAS-IN Manual 37-100 series (current fiscal year) which provides that

- a. Modification to an item currently in production may be applied by an ECP, which may or may not be developed into an MWO. If an item that is in production has assets that have already been delivered to field units, this equipment must have an MWO developed to apply the modifications made by the ECP. The development, testing, kits, and associated installations costs of this type of modification will be financed by procurement appropriations.
- b. Modification to an item that is already fielded and no longer in production but still in the operational inventory will be applied by an MWO. The development and testing of this type of modification should be financed by operations and maintenance appropriations, while the cost to procure the kits and the associated installations costs will be financed by procurement appropriations.
- c. Outside the factory, RD testing (for example, FORCE XXI) involves equipment that has been diverted from the Army's inventory specifically for rapidly developing modifications. Records of changes to equipment must be documented because this type of testing may or may not be developed into an MWO. However, RDTE will finance the development, testing, and any cost necessary to return the item to pre-existing configuration. If the decision is to develop the MWO, the cost to procure the kits and the associated installations costs will be financed by procurement appropriations.

3-10. Associated items of equipment

- a. MATDEVs for systems, components, and items mounted on, or installed in, another MATDEV's platforms must provide the kit that mounts or installs the item onto the primary platform.
- b. The MATDEV of the associated items of equipment (ASIOE) who is fielding, installing, or modifying equipment that is mounted on, or installed in, another MATDEV's platform will coordinate with the primary system's MATDEV to ensure that
- (1) The ASIOE and mounting/installation hardware are compatible and will fit onto or into the primary platform's design.
- (2) If a modification to a mount or installation hardware currently on the primary platform is required, the ASIOE MATDEV must develop, procure, install, and report the modification to the mount/installation hardware.
 - (3) Mount/installation hardware spares are modified in accordance with paragraph 3-5 f.
- (4) Application of these MWOs will be accomplished using the block modification process to the fullest extent, thereby minimizing manpower and resource requirements and equipment downtime.
- (5) The ASIOE MATDEV developing the modification applies and electronically records installation of the modification in accordance with chapter 5. The ASIOE MATDEV will provide a copy of this information to the primary platform systems MATDEV within 7 working days.
 - c. The primary platform MATDEV will ensure that
 - (1) Any required changes are made to the TDP.
 - (2) All applicable information is changed in primary systems technical manuals.
- (3) The application of the modification, as reported by the ASOIE MATDEV, is recorded in the primary system's configuration database.

Chapter 4 Modification Process

4-1. General

This chapter sets forth procedures for developing, budgeting, applying, and recording MWOs. The development, budget, application, and historical documentation of MWOs is a joint ASA(ALT), ODCSOPS, ODCSLOG, TRADOC, and USAMC process.

4-2. Modification process

- a. The MATDEV receives recommendation for changes from many sources and evaluates them. These recommendations can be for numerous reasons such as, safety, capability, technology change, software change, equipment deficiency or logistical, operational, and support changes, and so forth. If the MATDEV rejects the recommendation, the MATDEV will provide the originator the rationale for rejection. No further action is necessary. If the MATDEV accepts the recommendation, the MATDEV and combat developer (CBTDEV) will evaluate the recommendation jointly. (See DA Pam 70-3.) The recommendation, if accepted, could require either a material solution or a non-material solution. (See figure 4-1.)
- (1) Non-materiel solutions. If the CBTDEV determines that the recommendation should be accomplished by a non-materiel change, the CBTDEV will accomplish the change. Non-materiel changes include doctrine, training, leader development, organization, and/or soldier modifications.
- (2) Materiel solutions. For materiel solutions, the MATDEV is responsible for development of the modification. There are two ways that a modification can be developed.
- (a) The first way is from an ECP that has been developed in the factory. The ECP is applied to equipment that is still in production; however, if there is equipment in the field, and a DD Form 250 has been signed, the ECP must be developed into an MWO for application to the fielded equipment.
- (b) The second way is from an accelerated RD outside of the factory developmental testing (for example, FORCE XXI). Scenarios such as FORCE XXI, or any other developmental testing project, simulate a factory environment where a section of configuration items are used to develop changes and to test those changes (validation). Any such changes are truly engineering-based changes and must be documented in a manner that, when approved for application to the rest of the Army, will allow the orderly transition to a valid ECP/MWO. In essence, the only difference is how and where the Army develops, tests, and approves the change.
- b. During development of the ECP/MWO, the MATDEV must document all changes to components within the kits. This must include TM and SUM updates, repair parts definitions, IS family structures and coding in accordance with USAMC-R 700-30, cataloging in accordance with AR 708-1, and disposition.
- c. To ensure a timely flow of the modification through this process, the MSC MWO coordinator must assign a MCN per appendix D. The MSC MWO coordinator enters the MCN into the MMIS, and the MATDEV enters the MCN into their configuration database. Ideally, there will be one MCN per MWO. However, if the decision is made to have a block package of fully related MWOs applied, these MWOs will be identified to one MCN that will be entered into both the MMIS and the MATDEV's database. After the receipt of an MCN and approval by the CCB, the MSC publications control officer will assign an MWO number.
- d. The MATDEV will record the MWO number into the MATDEV's database and then report the MWO number, along with a brief description of the MWO, in the MMIS.
- e. The MSC MWO coordinator will confirm that the CCB has reviewed the following items to ensure that the MATDEV has sufficiently planned or proposed solutions:
 - (1) TMs and SUMs are being updated and funding for distribution is being identified.
- (2) Management plan identifies fleet density and projected application schedule. This plan must include the modification of spares at unit through depot levels.
 - (3) Proposed funding requirements are identified, including quantity requirements and spares.
 - (4) Provisioning master record will be updated.
 - (5) TDP will be updated.
 - (6) IS in accordance with AR 708-1, will be established and documented.
 - (7) New test equipment or tools will be identified and available.
 - (8) TPS will be updated to be available when needed.
- (9) Coordination of software and hardware changes to ensure that all needed changes are made and tested and that changes to one do not negatively impact the other.
 - (10) TADSS will be modified and updated.
 - (11) Use of embedded diagnostics.
- f. Semiannually (no later than 1 November and 1 May), MATDEVs will submit all MWOs along with supporting documentation, including the MCN, MWO number, and proposed P40 and P3 forms per DOD 7000.14-R to ASA(A-LT), and USAMC (RCS CSGLD 1970). ASA(ALT) and USAMC will review required documentation and forward (no

later than 1 December and 1 June) to the Army MWO Panel. (See fig 4-2.) The Army Modification Panel will evaluate and make recommendations to ODCSOPS. The evaluations will be forwarded to ODCSOPS (DAMO-FDR) (no later than 15 January and 15 July). ODCSOPS will use these evaluations of MWOs in the Army's prioritization and funding process to produce the Army 1-N list. The Army's MWO priority list will be extracted from the Army 1-N list and published annually as an AAE and an AMC Army modification prioritization list (AMPL). Annually, ODCSOPS will prescribe, by message, what information-specific elements and supporting data must be included with the MWOs documentation

- g. ODCSOPS (DAMO-FDR) will forward a copy of the AMPL to the PEOs, MSC, and MACOM MWO coordinators. A copy will also be published in the MMIS.
 - h. Prior to application of the first MWO kit to field units, the MATDEV will perform full validation/verification.
- i. When notified that funding is available, MATDEVs will develop the MWOFP. The MWOFP will be coordinated with the MACOM designated installation or activity before MWO kits are shipped. The MWOFP establishes a coordinated agreement between user and the MATDEVs on application of the MWO. The application scheduling plan within the MWOFP will be derived from HQDA ODCSOPS' approved prioritized sequence of MWOs in the equipment distribution scheduling system. A sample of a completed MWOFP is located in appendix B. The MATDEV will ensure maximum use of block and/or block package modifications whenever and wherever possible.
- j. Installation MWO coordinators or units will review the proposed MWOFP for inclusion of application schedule and will request out-of-sequence approval from the MATDEV. Approved changes with a proposed new date for field application will be forwarded to HQDA. A signed MWOFP forms the basis for MWO application.
- k. Commanders at all levels will assist in developing and providing needed resources to accomplish MWO applications. The preferred method of applying MWOs is through the MSC MWO coordinators.
- *l.* The MSC MWO coordinator will form and chair the MWO fielding review, which approves the final release of the MWO. This review will confirm that all actions outlined in paragraph 4-2 d(1) through (10) have been accomplished to the satisfaction of all members of the review. At the direction of the MWO fielding review, the MWOFP will be approved for execution.
- m. Using the signed MWOFP, the MATDEV will apply the MWO, recording the 9 data elements per paragraph 5-1 a (RSC CSGLD 1969). These data elements will be sent electronically or on disk to the MMIS. The MATDEV will also record the application of the MWO into the configuration database.

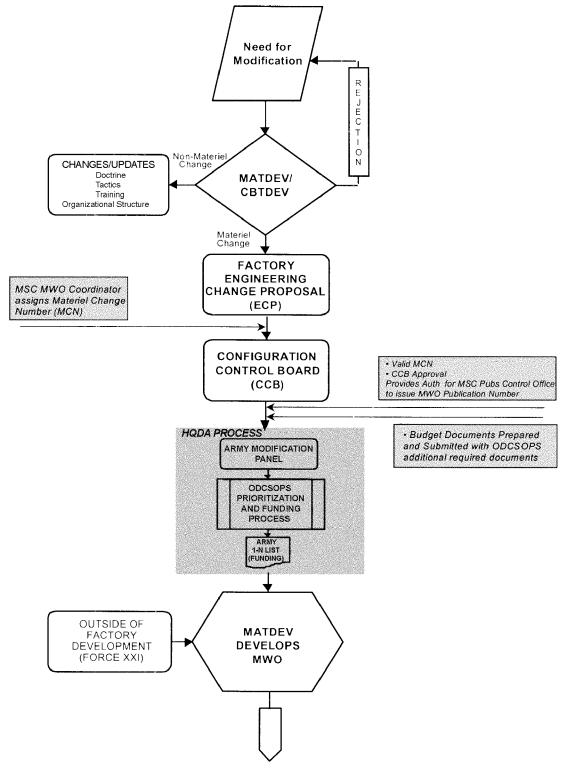


Figure 4-1. Modification Process

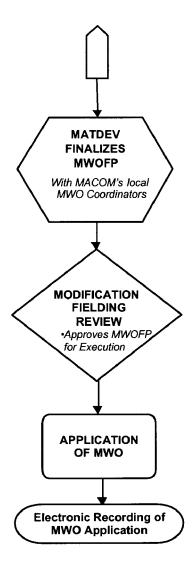


Figure 4-1. Modification ProcessContinued

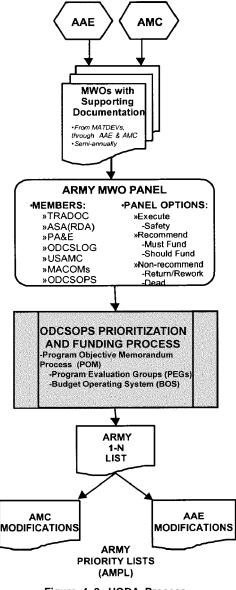


Figure 4-2. HQDA Process

Chapter 5 Modification Management Information System (MMIS)

5-1. General

- a. MMIS is a web-based system available to Army managers with internet access. It also possesses a dial-up capability. If other communications capabilities fail, email queries can be sent. Entry into the system is password-protected. Any new user can register online and receive an approved password within 48 hours. The level of access within the MMIS is set when the password is assigned. Users will be assigned access based on information provided at time of registration. Users will not have access to all modules within MMIS. Certain modules are restricted to Army managers who require access to the information within those modules.
- b. MMIS will assist users at all levels (unit level through Army leadership) to determine the equipment modification status of equipment end-items at the serial number level.
 - c. MMIS has 7 accessible modules:
- (1) MWO information. This module answers the questions of which MWOs are applicable to a serial-numbered piece of equipment, which MWOs have been installed, and which MWOs remain to be installed.

- (2) Budget information. This module provides budget-level financial information (quantity and value) of MWO kits that the MATDEV plans to acquire and install and the timeframe for completing these actions.
 - (3) MWO reporting. This module provides an on-line and an off-line method of reporting MWO applications.
- (4) MWO management. This module is used to create or enter a new MWO into the MMIS. It is then reviewed and/or revised by the MWO coordinators or the Army modification review panel.
- (5) *The MWO template.* This module is used to develop the official MWO. Once the MWO is developed and loaded back into the MMIS, all MSC, MACOM, and installation MWO coordinators are notified by email through this module.
- (6) MWO fielding plan. This module is used to create and coordinate all MWO FPs. MSC, MACOM, and installation coordinators have access to this module.
- (7) Administration. This module provides administrative information, general MWO information, and data source information.

5-2. Modification Management Information System inputs

- a. The baseline for the MMIS is the MATDEV's configuration database. MATDEVs that apply MWOs will maintain a configuration database; this database will have, at a minimum, the following nine data elements:
 - (1) MCN.
 - (2) MWO number being applied.
 - (3) Unit identification code (UIC).
 - (4) NSN of the end item under MWO.
 - (5) Serial number of the item under MWO.
 - (6) Registration number.
 - (7) Date of application.
 - (8) Hours required for application.
 - (9) Software version.
- b. If any of the nine data elements mentioned above are not available or no record is found, the following will be entered for that element:
 - (1) N/A, for information not available.
 - (2) N/R, for no record found.
- c. The MATDEV will maintain the required data elements in an accessible electronic database. The MATDEV will forward the database to the MMIS administrator on a monthly basis or as requested by the administrator (RCS CSGLD 1969). The data elements should be arranged like the sample database in figure 5-1.
- d. The organization responsible for the MWO application (contractor, depot, GS/DS, or organization) will report the application of the MWO. Reporting will be accomplished by electronic means, either directly into MMIS using the MWO applied option, via email submission, or recording elements on a 3.5-inch disk and mailing it to the MMIS administrator. The format for reporting can be downloaded from the MMIS.
- e. The MMIS baseline and reported MWO applications will be crosswalked against established Army databases to ensure that the most accurate modification information, by serial number, is provided to the users.

5-3. Modification Management Information System accessible modules

- a. MWO information. This module has one area to access equipment data. In this area, the user must select one of two mandatory settingseither model designation or end item NSN. Also there are three optional settings that may be selected: serial number, MWO publication number, and/or UIC. Users may select these or any combination of these to perform their search. The more information provided, the more specific the query response will be. The end result of all searches performed in this area is a serial number information page for each end item. This page reports MWOs applied, MWOs due, and software version.
- b. Budget information. This module has two areas, accessible by MATDEVs, PEOs, ODCSOPS, ASA(ALT), ASA(FM), and MSC MWO coordinators.
- (1) Budget data. In this area, the user must select one of two mandatory settings: either model designation or end item NSN. There are also two optional settings: materiel change number and report choices.
- (2) SSN/LIN. In this area, the user must select a model designation. There are three optional settings that may be selected: UIC, LIN, and SSN.
 - c. MWO reporting. This module has two areas, accessible by all users.
- (1) On-line. This is an on-line form to be filled in with modification data to report the application of MWOs by serial number at the UIC level.
- (2) Off-line. Off-line reporting is done by downloading an executable program and installing it on any ADP equipment operating in an electronic environment. The MWO application information will then be recorded in the program format and saved as a text file that can then be sent by email or mailed on a 3.5-inch disk.
 - d. MWO management. This module is accessed by the MSC MWO coordinators and the Army modification review

panel. The MSC MWO coordinator enters MWO header data (MCN information, MWO number, end item, MWO type, MWO priority, and description). The MMIS then assigns an MCN to the new entry. The Army modification review panel uses this module to review all MWOs as part of the Army's prioritization and funding process.

- e. MWO template. This module is accessed by MATDEVs, MSC, MACOM, and installation MWO coordinators. The MATDEV or MSC MWO coordinators use the template to create a new MWO. This MWO will then be saved into the system and archived so that the MACOM and installation MWO coordinators can view the MWO for planning purposes prior to start of MWO application.
- f. MWO fielding. This module is accessed by the MATDEV, MSC, MACOM and installation MWO coordinators. The MWOFP is created and then posted by the MATDEV. The MATDEV uses this module to notify the MACOM and specific installation MWO coordinators that a new MWOFP is available for coordination and response.
 - g. Administration. This module has three areas, accessible by all users. They are:
 - (1) Data. Data contains an on-line question capability to ask questions directly to the MMIS system administrator.
- (2) Sources. Sources offers a listing of the MMIS data sources, the date of the last download, and a point of contact for that data source.
 - (3) Applied MWOs. Applied MWOs is an historical library of published MWOs.

SAMPLE DATABASE FORMAT FOR USE IN THE MODIFICATION MANAGEMENT INFORMATION SYSTEM

END ITEM <u>NSN</u>	END ITEM SERIAL NO.	END ITEM REGISTRATION NO.	UIC	<u>MCN</u>	MWO <u>APPLIED</u>	DATE APPLIED	HRS TO APPLY	Software Revision
2350-01-087-1095	D12135	N/R	WAE0AA	1-89-04-1442	9-2350-200-20-12	3/1/1996	2.5	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8	

For any of the data elements, if the information is not available, record an "N/A". If there is no record of the data element, record "N/R".

- Note 1: The 13 digit National Stock Number of the end item piece of equipment which is being modified.
- Note 2: The serial number of the end item piece of equipment being modified.
- **Note 3:** The registration number of the end item piece of equipment being modied. This number is different than the NSN or the serial number.
- Note 4: The unit identification code of the military unit which owns the end item piece of equipment being modified.
- Note 5: The MCN can be obtained from the official MWO, item 15.
- Note 6: The MWO number of the modification being applied to the end item piece of equipment.
- Note 7: The date that the modification was completed and accepted for the serial number end item piece of equipment.
- **Note 8:** The actual maintenance hours required to apply the modification to the serial numbered end item piece of equipment. This may be different from the estimated maintenance man-hours identified in the MWO announcement.

Figure 5-1. Sample MMIS database

Chapter 6 Modification of multiservice equipment and systems

6-1. General

This chapter applies to multiservice equipment and systems for which the Army has either been named executive Service/lead military department, or is a participating Service for equipment assigned to another Service.

6-2. Army executive Service or lead military department

- a. All proposed equipment and system modifications will be processed and controlled by mutual agreement between the affected Services. No changes will be made nor will an MWO be issued unless the CCB has approved the change.
- b. All multiservice changes will be made through publication of a multiservice-numbered MWO. Changes will not be made before the published MWO is available. Exceptions are authorized where safety to personnel, security, emergency mission requirements, or loss of property warrant them. When exceptions are made, the modification will be confirmed by expediting a multiservice MWO.
- c. MACOM commanders may authorize field emergency changes only when life, safety, or security dictates. All emergency changes will be documented and processed through the internal CCB and through the multiservice CCB.
- d. Integrated logistics support planning, including the development/update of joint logistic support plan, for proposed modification of equipment or systems will start when the MATDEVs of all the military Services approve. This planning will be done according to AR 700-127 and AR 700-129.
- e. All approved multiservice equipment or system modifications will be reported when complete. The activity or organization applying an MWO reports application of the MWO in accordance with the MWOFP. The Army MATDEV, along with other Service MATDEVs, will develop methods of communication for data exchange.
- f. For multiservice consideration, the Army MATDEV is responsible for funding the engineering leading to the modification. Funding of all modifications and acquisition of modification kits will normally be carried out by each Service based upon stated requirements. Navy, Marine Corps, and Air Force or other Federal agencies, operation and maintenance commands/components are responsible for funding the application of modifications for their respective commands or by designated Army depot and reporting the application in accordance with the MWOFP.

6-3. Army participating Service responsibility

- a. The principles in the paragraphs above apply to multiservice equipment and systems changes for which other than Army is the designated executive Service or lead military department and should be applied as appropriated and agreed upon.
- b. The Army MATDEV will adopt the modification instruction or authorization format prescribed by the lead Service. Army managers will provide MWO numbers for multiservice-numbered change instructions prepared by the responsible Service.
- c. Army modification field reporting will be done in accordance with the MWOFP. Other responsible Services' MATDEVs will be consulted to determine procedure and method of reporting data exchange.

Appendix A References

Section I

Required Publications

AR 220-1

Unit Status Reporting. (Cited in paras 3-5 c(3)(a), 3-5 d(3), and 3-5 e(2).)

AR 385-16

System Safety Engineering and Management. (Cited in paras 3-1 a(2), 3-5 d(3), and 3-5 d(1).)

AR 700-127

Integrated Logistic Support. (Cited in para 6-2 d.)

AR 700-129

Management and Execution of Integrated Logistics Support Program for Multiservice Acquisitions. (Cited in para 6-2 d.)

AR 700-138

Army Logistics Readiness and Sustainability. (Cited in paras 3-5 e(3)(a), 3-5 d(3), and 3-5 e(2).)

DA Pam 70-3

Army Acquisition Procedures. (Cited in paras 2-4 d, 2-5 a, and 4-2 a)

DA Pam 738-750

Functional Users Manual for the Army Maintenance Management System. (Cited in paras 3-5 c(3)(a), 3-5 d(3), and 3-5 e(2), and App B.)

DA Pam 738-751

Functional Users Manual for the Army Maintenance Management System-Aviation. (Cited in paras 3-5 c(3)(a), 3-5 d(3), and 3-5 e(2).)

Section II

Related Publications

A related publication is source of additional information. The user does not have to read it to understand the publication.

AR 12-1

Security Assistance, International Logistics, Training, and Technical Assistance Support Policy and Responsibilities

AR 12-8

Security AssistanceOperations and Procedures

AR 37_1

Army Accounting and Fund Control.

AR 37-100

Account/Code Structure.

AR 70-1

Army Acquisition Policy

AR 70-62

Airworthiness Qualifications of U.S. Army Aircraft Systems

AR 71-9

Materiel Requirements

AR 73-1

Testing and Evaluation Policy

AR 95-1

Flight Regulations.

AR 310-25

Dictionary of United Stated Army Terms

AR 310-50

Authorized Abbreviations and Brevity Codes

AR 350-38

Training Devices Policies and Management

AR 700-4

Logistics Assistance

AR 700-127

Integrated Logistic Support

AR 700-129

Management and Execution of Integrated Logistics Support for Multiservice Acquisitions

AR 700-142

Materiel Release, Fielding, and Transfer

AR 702-7

Product Quality Deficiency Report Program

AR 708-1

Cataloging and Supply Management Data

AR 710-1

Centralized Inventory Management of the Army Supply System.

AR 710-3

Asset Transaction Reporting System

AR 750-1

Army Materiel Maintenance Policy and Retail Maintenance Operations

AR 750-6

Ground Safety Notification System

DODD 5000.1

Defense Acquisition

DOD 5000.2-R

Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information (MAIS) Acquisition Programs.

DOD 7000.14-R

DOD Financial Management

DFAS-IN Manual 37-100 series

Financial ManagementArmy Management Structure

MIL-STD-2549

Configuration Management Data Interface (Available online at http://astimage.daps.dla.mil/online)

TM 38-450

Storage and Maintenance of Prepositioned Materiel Configured to Unit Sets

Section III

Prescribed Forms

This section contains no entries.

Section IV

Referenced Forms

Except where otherwise indicated below, the following forms are available on the Army Electronic Library (AEL) CD-ROM and the USAPA web site (www.USAPA.army.mil).

DA Form 11-2-R

Management Control Evaluation Checklist

DA Form 2028

Recommended Changes to Publications and Blank Forms

DA Form 2407

Maintenance Request (This form is available through normal supply channels.)

DD Form 250

Materiel Inspection and Receiving Report

SF 368

Quality Deficiency Report

SF 1080

Voucher for Transfer Between Applications and/or Funds

Appendix B

Instruction for Preparation of Modification Work Order Fielding Plan for Modification Work Orders

B-1. Purpose

The MWOFP defines and schedules an annual MWO application program (1 October through 30 September, fiscal year execution) with user commands, installations, or activities. The MWOFP will be sent to arrive at MACOM installations or activities no later than 15 calendar days before MWOFP negotiation conferences. If policy requires coordination with MACOM headquarters, the MWOFP will be provided no later than 90 calendar days prior to negotiations.

B-2. Tasks

- a. MATDEVs will
- (1) Develop proposed fielding plans based on Program Objective Memorandum (POM) funding guidance to serve as the initial point of negotiations.
 - (2) Ensure that a fielding plan is developed and implemented on a weapon system basis where applicable.
- (3) Serve as lead command for fielding plan development, negotiation, and implementation when MWO requirements originate from other MATDEVs for an assigned weapon system, end item, or TADSS.
- (4) Serve as supporting command when another MATDEV establishes an MWO requirement on component or assembly used on a weapon system, end item, or TADSS.
- (5) Negotiate the terms and conditions including quality assurance of each fielding plan with MACOMs and their subordinate posts, camps, stations, and organizations.
 - (a) When negotiation fielding plans with FORSCOM units, include Army Reserve Command.
 - (b) Negotiate directly with MWO POCs at TRADOC installations and furnish copy to HQ TRADOC.
 - (c) Provide 30 calendar days' notice prior to arrival of the team and 7 calendar days' reconfirmation notice.
 - (d) Identify special equipment and facilities if needed. If none, so state.
 - b. Organization that applies the modification (user applied or MATDEV) will
 - (1) Accomplish MWO application as stated in fielding plans.
 - (2) Constantly monitor MWO programs to prevent any problem from impeding completion of the change.
- (3) Perform and bill reimbursable applications, SF-1080 (Voucher for Transfer Between Applications and/or Funds), as negotiated in the fielding plan.

B-3. MWOFP Format

The MWOFP will clearly define the work, assign responsibilities, and schedule resources for each signatory command. The format in figure B-1 will be used:

MWO No: 9-1235-123-30-03

MODIFICATION WORK ORDER FIELDING PLAN

M249 Squad Automatic Weapon

- 1. This document represents an agreement for application of the modification described herein and for necessary administrative and logistical support to accomplish this modification effort. Full agreement between the Tank-Automotive and Armament Command Rock Island (TACOM) and Fort Riley, Ks is indicated by the signatures of the authorized representatives at the close of this document.
- 2. Fiscal Year of Applicability of MWO: FY 96-99
- 3. Modification Work Order (MWO) Identification
 - a. MWO Number: 9-1235-123-30-03
 - b. Title: Modification of the M249 Machine Gun (SAW)
- c. Purpose: The purpose of this modification is to reduce the incidents of failure-to-feed malfunctions particularly on tracer rounds by using a modified bolt. The new bolt has an angle machined into the bolt face to aid in the proper feeding of the ammunition into the chamber of the barrel. The modification replaces the present bolt with a modified bolt. Under this MWO, a unit's prescribed load list/authorized stockage list (PLL/ASL) bolts must also be swapped.
 - d. Category of Maintenance: Direct Support
 - e. Classification: Routine
- f. MWO to be applied prior to or concurrently with this MWO: None
 - g. Material Change (MC) No: 1-95-05-7916
- 4. Equipment Identification:
 - a. End Item to be modified:

Nomenclature	nsn	LIN	Model
M249, 5.56mm,	1005-01-127-7510	M09009	
M.G.			

Figure B-1. Sample format for MWOFP

b. Components to be modified:

Nomenclature NSN PN

Bolt, Breech 1005-01-211-8414

c. End Item after modification:

Nomenclature NSN LIN Model

M249, 5.56mm, 1005-01-127-7510 M09009

M.G.

d. Components after modification:

Nomenclature NSN PN

Bolt, Breech 1005-01-211-8414

e. Serial Number Range to be modified: All except new fieldings in 1995 and beyond. All serial numbers less than 40,000 or greater than 91,000.

- f. Level of calibration required: Headspace gage (9350102) must be available. It is calibrated per TB 43-180.
- 5. Modification Team:
 - a. Composition: One MOS 45B/K or equivalent.
 - b. Source: User
- 6. Equipment Downtime/Manhours Required/Skills for Modification:
 - a. Equipment Downtime: 1 Hour
 - b. Manhours Required: 0.1 Man hour
 - c. Skill Requirements: MOS 45B/K
- 7. Condition code of equipment to be modified: All
- 8. Modification kit:
 - a. NSN: 1005-01-408-7920
 - b. Weight: 8 oz.
 - c. Cube: N/A
 - d. Dimensions: 1" x 1" x 3"
- 9. Modification site: Direct Support Maintenance Shop or Arms Room.

Figure B-1. Sample format for MWOFPContinued

- 10. Facility Requirements: Direct Support Maintenance Shop or Arms Room.
- 11. User support equipment/requirements: Request installation MWO Coordinator or designee act as local coordinator at the using activity to ensure that the MWO is applied, DA Forms 2407 and 5504 are completed, and that actions stated in paragraph 14b and c.
- 12. Quality Assurance Responsibilities: Submit SF 368 (Quality Deficiency Report (QDR)) upon discovery of discrepancy.
- 13. Modification Application Schedule:

Location Ft. Riley Ks

Date Jan 99

- 14. Impact Upon Logistic Support:
 - a. Repair Parts Added:

NSN Nomenclature & Part Quantity
Number

1005-01-392-6194 Bolt, breech

b. Disposition of Displaced Repair Parts:

nsn	Nomenclature & Part Number	Quantity	Disposition
1005-01-	Bolt, breech		Package and ship
211-8414			to:
			FN Inc.
			797 Clemson Rd.
			ATTN: FNIO
			108/DODAAC: CMALH3
			Columbia, SC 29203

- c. Technical Manuals Affected: TM 9-1005-201-23 & P
- 15. Supply, Technical and Training Assistance to be Furnished: The extractor group of the bolt assembly now has a hard time replacement interval. The interval varies with the type of unit the weapon is assigned. These parts are now available as a kit: parts kit, gun, and extractor, NSN 1005-01-383-0168. See TM.

Figure B-1. Sample format for MWOFPContinued

16. MWO Sponsoring Agency POC:

Name: Director, Tank-Automotive and Armament Command, Rock Island Address: ATTN: AMSTA-AC-MCMRL, Joann Roberts, Rock Island, IL

61299-7630 Telephone:

DSN: 793-1669

COMM: (309) 782-1659

FAX: 793-3603

- 17. MWO Application Reporting: The user must complete DA Form 2407/5504, Maintenance Request, to report modification application. Refer to DA Pam 738-750 for completion instructions. Individual or organization that applies the MWO will report the application to the Modification Management Information System in accordance with AR 750-10.
- 18. Confirmation of Receipt of MWOFP: Confirm receipt of this MWOFP to the MWO Action Officer listed in paragraph 16 of this document.
- 19. Confirmation of Receipt of MWO Kits: Confirm receipt of modification kits to the MWO Action Officer listed in paragraph 16 of this document.
- a. User command MWO POC will coordinate receipt and storage of MWO kits and schedule equipment for modification. User will notify MATDEV MWO Action Officer of receipt of kits either in writing, by telephone, e-mail or by FAX immediately upon receipt of MWO kits/equipment.
- b. MATDEV MWO Action Officer will notify the user of kit shipment with sufficient detail to allow shipment trace. Kits will not be shipped more than 120 days in advance of scheduled modification.
- c. All MWO kits remain under the control of the MATDEV. The applying command will provide direction for disposal of excess kits.

Figure B-1. Sample format for MWOFPContinued

20. User Reporting

User POC:

NAME: Joseph Flint

ADDRESS: Bldg 8100 Ft. Riley Blvd., Ft. Riley Ks. 66440

TELEPHONE: DSN: 856-4242

COMM: 913-238-4242 FAX: 913-238 4249

E-MAIL: joseph.flint@hq-ftriley.army.mil

21. Delivery and Storage of MWO Kits:

Please provide a complete ship-to address for the MWO kits:

ADDRESS: Central Receiving

Building Number: 801 DODAAC: W80QEAA

POC for the management of the kits:

Name: James Disk

DATAFAX: 913-238-9976 Phone: 913-238-6799

Request kits be stored in a secured area until kits are applied.

22. Funding:

Note: The user needs only to complete this paragraph if funding is required, otherwise leave blank.

- a. MWO kits for above described modification program are free issue to the user.
- b. Reimbursement will be based on the user's unit cost estimate as a fixed price for the current FY, prorated by the following items:

Man-hour direct labor cost

Overhead indirect expense

Consumable material cost

Transportation (equip/personnel)

Total estimated cost per end item

Number of end items

Total estimated cost for all systems

- c. NOTE: Specifically excluded from these estimates will be the cost for depreciation of plant equipment and cost of military labor.
 - d. User's comptroller POC: LTC David F. Foster
 - e. Fiscal Station Number: 12345
 - f. Installation Activity Code: 7DA872
 - q. Address: Bldq. 14a Whiteside Rd, Ft. Riley Ks.
 - h. Commercial/DSN Phone: 913-238-3321

Figure B-1. Sample format for MWOFPContinued

i. Fax: 913-238-0086

j. E-mail: david.foster@hq-ftriley.army.mil

23. User Input Information: NOTE: Include ASL/PLL assets and floats under your purview.

	QTY	Serial No.	UIC
End Item	345		
Float	14		
ASL	23		
PLL	12		

24. This MWOFP will remain in effect until termination by mutual agreement or by either party upon 60 days written notice. Any changes to the foregoing must be fully coordinated and mutually agreed to by the undersigned.

Date: 11-11-89

Signature:

User Command Representative

Date: 11-11-89

Signature:

TACOM - Rock Island MWO Coordinator

Figure B-1. Sample format for MWOFPContinued

B-4. Additional elements

In addition to data above, the MATDEV and MACOM may add or request that more data elements be included to provide essential data as an appendix to the MWOFP.

B-5. Distribution of the fielding plans

All fielding plans will be directed to action addresses. In addition, copies will be furnished to the following:

- a. HQ TRADOC (ATBO-HM).
- b. Commander, U.S. Army Security Assistance Center (USASAC). USASAC will notify military assistance advisory groups or similar groups if the equipment to be modified is in a foreign government inventory. A minimum of 150 days should be allowed for foreign customers to submit funded requirements.

Appendix C Memorandum of Understanding

The following figure is a sample Memorandum of Understanding.

MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. ARMY MATERIEL COMMAND

THE U.S. ARMY MATERIEL COMMAND

AND

THE U.S. ARMY XXXXXXX COMMAND

SUBJECT: Application of Department of the Army Modification Work Order (DAMWO)

1. Purpose

This document represents the basic agreement between the U.S. Army Materiel Command (AMC) and the U.S. Army XXXXXX Command (XXXXXX) for the application of Department of the Army Modification Work Orders (DAMWO) as pertains to equipment in the possession of XXXXXX. This Memorandum of Understanding (MOU) establishes broad policies and procedures, which will govern implementation of this program and responsibilities of each Command and its subordinate elements. This document shall serve as the master agreement for further development of individual Modification Work Order Fielding Plan (MWOFP) between AMC major subordinate commands (MSCs) and XXXXXXX installation as authorized agents for HQ AMC, and XXXXXXX. The signatures of their representatives indicate full agreement by HQ AMC and XXXXXXX.

2. Fiscal year

FYXX and FYXX.

3. Modifications

- a. Current MWOs (backlog modifications not applied by DATE).
- b. New and future MWOs (issued after DATE).

4. General

a. The AMC MSC having logistic support responsibility for the weapon systems/end item will establish a centralized control point for all modifications to be applied to that system, to ensure all applicable modifications are applied concurrently by weapon system/end item basis to the maximum extent possible.

Figure C-1. Sample format for Memorandum of Understanding

- b. The XXXXXXX installations will participate in the modification of equipment only after a DAMWO is published. Specific details of support to be provided by the MSCs and the XXXXXXX installation in applying the modification will be incorporated in a separately negotiated and executed MWOFP for each weapon system/end item application. The XXXXXXX authorizes installations to negotiate modifications within current resources. Any agreement using XXXXXXXX labor, that is not reimbursable, will require approval by XXXXXXX. When civilian labor is used, AMC will reimburse XXXXXXX.
- The AMC MSCs may require a validation of the national level MWO data based on XXXXXXXX installation records and will forward validation listing to XXXXXXX installations with information copy to HQ XXXXXXX, ATTN: xxxxxx, using separate formats for serial number managed and non serial number managed Information will be provided for each MWO identifying the UIC and unit location of the serial numbered item and a brief description (graphic or narrative) to assist in determining whether the modification has been applied. A concurrent request will be made for information on the quantity of MWO kits available within each XXXXXXX installation. Installations will annotate the validation listings by physical inspection of the equipment for those modifications, which are visible and do not require disassembly of equipment. This will be accomplished as negotiated between the MSCs and the installation. All labor charges will be reimbursed to XXXXXXX. Listings will be processed and returned to the MSC within 60 days. Validation of MWO Application Status Accounting (RCS DRC-855) applies to all validation listings. The AMC MSCs and the Logistics Assistance Representatives (LAR) will assist the installations in this equipment inspection, upon request.

5. Responsibilities

- a. HQ AMC will arrange and chair coordinating/negotiating MWO workshop between MSCs and XXXXXXX installations at least annually or more frequently, if required.
- b. HQ XXXXXX will establish or designate an office with the responsibility for monitoring MWO requirements and applications to equipment assigned to FORSCOM installations and support areas.

Figure C-1. Sample format for Memorandum of UnderstandingContinued

c. XXXXXXX Installations:

- (1) Designate an individual with the responsibility for managing the MWO requirements and applications to equipment assigned to XXXXXXX installations and support areas. The head of this office or organizational element will coordinate directly with AMC MSC representatives.
- (2) Forty-five days after receipt of MWOFP from AMC MSCs, XXXXXXX installations will forward a concurrence or recommended changes to the appropriate AMC MSC (see para d(4) below). This will require close coordination with all customer activities. Information copies of all correspondence between installations and AMC will be provided to HQ XXXXXXX, ATTN: xxxxxx.
- (3) Budget for and attend modification program negotiating/coordinating workshops.
- (4) Provide administrative and logistical support (base operation support per AR 310-25) required for modifications applied by MWO application teams as agreed to in the MWOFP.
- (5) May negotiate MWOFPs with AMC MSCs to perform quality assurance (QA) inspections and acceptance on low-density modification.
- (6) Provide personnel to augment AMC MSC application teams as negotiated in individual MWOFPs.
- (7) Installations with tenant MTOE maintenance units may use these units for MWO applications as appropriate to enhance training and reduce overall costs.
- (8) Notify equipment users, in the MWOFP, of requirements to deliver equipment, as scheduled, to the modifications site, upon call of the modification team.
- (9) Are responsible for all repairs discovered prior to, during, and after modification, except those incurred by modification teams during modification of MWO.
- (10) Are responsible for the security and proper storage of all MWO kits from receipt until issue to MWO application team.
- (11) Are responsible for quality of work when MWO is applied by the installation.

d. AMC MSCs:

(1) Are responsible for funding, programming, scheduling, application, and QA requirement functions not negotiated with and accepted by XXXXXXXX, on all equipment modifications managed by AMC PMs, AMC MSC managers, and PEO managers whose systems are being modified using AMC MSC matrix support.

Figure C-1. Sample format for Memorandum of UnderstandingContinued

- (2) Will apply MWOs with depot/contract field teams except when the nature of the modification precludes efficient or economical team application. When modifications are proposed for application by an XXXXXXX installation, MSCs will obtain a prior agreement in the MWOFP from the XXXXXXX installation and a commitment to apply modifications within a specified time.
- (3) Draft MWOFP will be forwarded by the appropriate MSC to XXXXXXX installations for review with copy furnished to HQ XXXXXXX, ATTN: XXXXXXX, 75 days prior to proposed MWO workshop.
- (4) Applicable MSCs will meet with XXXXXXX installations during the annual MWO workshop to resolve any remaining applications or scheduling problems (see para 5c(3) above).
- (5) Arrange for timely reimbursement to XXXXXXX installations for MWOs applied using FORSCOM funded resources, as negotiated in the MWOFP.
- (6) Arrange for application of emergency/urgent MWOs during contingency operations.

6. Review and Termination

This MOU will be reviewed biannually by both parties at least 90 days before expiration of fiscal year identified in paragraph 2 of this MOU, or prior to Command Operating Budget preparation, as mutually agreed, to ensure orderly resource planning. This MOU will remain in effect until terminated by mutual agreement or by either party upon 180 days written notice. This MOU will remain in force after mobilization, but may be modified by mutual agreement if existing conditions require such action.

FOR XXXXXXX FOR AMC

Figure C-1. Sample format for Memorandum of UnderstandingContinued

Appendix D Materiel Change Number Assignment Process

D-1. The MSC MWO coordinators assign materiel change numbers

The MSC MWO coordinators, as part of the CCB process, will assign MCN. The MCN is a nine-digit number that identifies the modification in the early part of the modification process all the way through to the application and recording of the modification. The MCN, once assigned, will never change. One MCN will be assigned for each modification. If more than one MWO is assigned to an MCN, the MSC MWO coordinator will keep track of all MWOs assigned to an MCN. The MCN will be used on all modification documentation, including all procurement documentation (P forms) per DOD 7000.14R, and in the formal MWO.

D-2. Explanation of Materiel Change Numbers

The MCN is formed as follows:

- a. The first digit (for example, 1-99-03-1004) stands for the materiel developer.
- 1 U.S. Army Materiel Command
- 2 Army Acquisition Executive
- 3 Chief of Engineers
- 4 U.S. Army Signal Command
- 5 The Surgeon General
- b. The second and third digits are separated from the first by a hyphen (for example, 1- 99-03-1004). These two digits stand for the fiscal year in which the modification is first submitted to the materiel developer for approval or the fiscal year approved by the modification approval authority.
- c. The fourth and fifth digits are separated from the second and third by a hyphen (for example, 1-99-03-1004). These digits stand for the general category of equipment being modified.
- 01 Aircraft
- 02 Missiles
- 03 Weapons and tracked combat vehicles
- 04 Tactical and support vehicles
- 07 Communications and electronics equipment
- 08 Other support equipment
- 09 Ammunition
- d. The sixth through ninth digits are separated from the fourth and fifth by a hyphen (for example, 1-99-03- 1004). These are assigned by the MSC MWO coordinator to identify each modification. MWO coordinators must ensure that no two MCNs have the same number.

Appendix E

Management Control Evaluation Checklist

Section I

Army Modification Program checklist to assist AMC DCSLOG

E-1. Purpose

The purpose of this checklist is to assist AMC DCSLOG in evaluating the key management controls listed below. It is not intended to cover all controls.

E-2. Instructions

Answers must be based upon the actual testing of controls (for example, document analysis, direct observation, interviewing, sampling, simulation, or other). Answers that indicate control problems must be explained (and corrective action indicated) in supporting documentation. These controls must be evaluated in accordance with the schedule in the Management Control Plan.

E-3. Test Questions

- a. Does each MSC have an MWO coordinator chartered by the MSC commander?
- b. Does each Life Cycle Software Engineering Center have a software ECP/SCP coordinator chartered by the SEC commander?
 - c. Are the MSC MWO coordinators assigning material change numbers?
 - d. Are MSC MWO coordinators conducting MWO fielding reviews prior to the MWO execution?
- e. Is MWO MATDEV coordinating MWOFP with the MACOM's designated installation or activity MWO coordinator prior to shipping the MWO kits?

E-4. Comments

Help make this a better review tool. Submit comments to the HQDA functional proponent: Deputy Chief of Staff for Logistics (DALO-SMM), 500 Army Pentagon, Washington, DC 20310-0500. (Provide information copy to Commander, USALIA, ATTN: LOIA-LM, New Cumberland, PA 17070-5007.)

Section II

Army Modification Program checklist to assist ADC-S/MACOM G-4

E-5. Purpose

This checklist is to assist ADC-S/MACOM G-4 in evaluating the key management controls listed below. It is not intended to cover all controls.

E-6. Instructions.

Answers must be based upon the actual testing of controls (for example, document analysis, direct observation, interviewing, sampling, simulation, or other). Answers that indicate control problems must be explained (and corrective action indicated) in supporting documentation. These controls must be evaluated in accordance with the schedule in the Management Control Plan.

E-7. Test Questions

- a. Is there an individual/organization designated as the MACOM MWO coordinator?
- b. Does each post, camp, or station have an individual appointed as the installation MWO coordinator?
- c. Is the MWO coordinator attending the annual Modification Coordination Workshop?
- d. Is the MWO coordinator reviewing all MWOFPs and providing timely feedback to MATDEVs, including complete ship-to address, POC for management of kits once received, and quantity of items in ASL/PLL and fielding schedule?
- e. Is the MWO coordinator properly coordinating MWOFPs between the equipment owning units and the parties performing the modifications to minimize disruptions to mission performance?

E-8. Comments

Help make this a better review tool. Submit comments to the HQDA functional proponent: Deputy Chief of Staff For Logistics (DALO-SMM), 500 Army Pentagon, Washington, DC 20310-0500. (Provide information copy to Commander, USALIA, ATTN: LOIA-LM, New Cumberland, PA 17070.)

Glossary

Section I

Abbreviations

AAE

Army acquisition executive

AAO

Army acquisition objective

ABO

Army Budget Office

ACAT

acquisition category

AMC

Army Materiel Command

AMCOM

Aviation and Missile Command

AMDF

Army master data file

AMPL

Army modification priority list

APN

Army part number

APO

Army procurement objective

APS

Army prepositioned stock

AR

Army regulation

ASA(ALT)

Assistant Secretary of the Army for Acquisition, Logistics, and Technology

ASIOE

associated items of equipment

ASL

authorized stockage list

AWCF

Army working capital fund

CBTDEV

combat developer

CCB

Configuration Control Board

CCI

COMSEC control item

CF

copy furnished

CG

commanding general

COMSEC

communications security

CONUS

Continental United States

CRB

Configuration Review Board

DAMPL

Department of the Army master priority list

DCSLOG

Deputy Chief of Staff for Logistics

DCSOPS

Deputy Chief of Staff for Operations and Plans

DMWR

Depot Maintenance Work Request

DODAAC

Department of Defense Army activity code

DOD

Department of Defense

DODD

Department of Defense Directive

DODI

Department of Defense Instruction

DSAFE

Depot Supply Activity, Far East

ECP

engineering change proposal

EIR

Equipment Improvement Report

EUSA

Eighth U.S. Army

\mathbf{EW}

electronic warfare

EW/SIGINT

electronic warfare/signal intelligence

FAQ

frequently asked questions

FORSCOM

Forces Command

FY

Fiscal Year

HFE

human factors engineering

HQDA

Headquarters, Department of the Army

нті

horizontal technology integration

IS

interchangeability and substitutability

ILS

integrated logistics support

INSCOM

U.S. Army Intelligence and Security Command

LIN

line item number

MACOM

major Army command

MATDEV

materiel developer

MC

materiel change

MCN

materiel change number

MDW

Military District of Washington

MENS

Mission Essential Needs Statement

MIS

management information system

MMIS

modification management information system

MOA

Memorandum of Agreement

MOP

maintenance operational procedures

MOS

military occupational specialty

MOU

Memorandum of Understanding

MRB

MWO Review Board

MSC

major subordinate command

MTOE

Modification Table of Organization and Equipment

MTS

modernization through spares

MWO

modification work order

MWOFP

Modification Work Order Fielding Plan

NGR

National Guard Bureau

NMC

not mission capable

N/R

no record

NSAI

National Security Agency Instruction

NSN

national stock number

OCAR

Office of the Chief of Army Reserves

ODCSLOG

Office of the Deputy Chief of Staff for Logistics

ODCSOPS

Office of the Deputy Chief of Staff for Operations

OMA

Operation and Maintenance, Army

ORD

operational requirement document

OT/DT

operational testing/developmental testing

P3I

preplanned product improvement

PA

procurement appropriation

PAE

program analysis and evaluation

PEO

program executive officer

PIP

Product Improvement Program

PLL

parts load list

PM

program manager

PN

part number

POC

point of contact

POM

Program Objective Memorandum

PPSS

post production software support

PRON

procurement request order number

QA

quality assurance

QTY

quantity

RD

research and development

RAM

reliability, availability, maintainability

RDTE

research and development/test and evaluation

$\mathbf{R}\mathbf{M}$

resource management

SACS

structure and composition systems

SEC

Software Engineering Center

SEP

System Enhancement Program

SF

Standard Form

SIGINT

signal intelligence

SIP

System Improvement Program

SLEP

Service Life Extension Program

SOUM

Safety of Use Message

SOUTHCOM

Southern Command

SSF

single stock fund

SUM

software user guide

TADSS

training aids, devices, simulations, and simulators

TB

Technical Bulletin

TDP

technical data package

TM

Technical Manual

TOE

table of organization and equipment

TPS

test program set

TRADOC

U.S. Army Training and Doctrine Command

UIC

unit identification code

USA

United States Army

USAMC

U.S. Army Materiel Command

USARJ

U.S. Army Japan

USAREUR

United States Army Europe

USASAC

U.S. Army Security Assistance Center

VCSA

Vice Chief of Staff, Army

Section II

Terms

Block modification

The combining of equipment changes into blocks of MWOs that are applied concurrently regardless of MSC/MATDEV responsibility.

Block package modification

The combining of related concurrent MWOs that are specific to one system.

Canceled MWO

A published MWO that is deleted before any application is performed or, if performed, applied kits removed and all references to the MWO removed from all publications.

Commodity command

AMC major subordinate command or activity that performs life cycle management functions, including item management and logistic support for specific commodity groups.

Configuration status accounting

That status accounting function that provides traceability of configuration baselines and changes thereto and acts as management tool for accomplishing all related tasks resulting from such changes.

Current MWO

A published MWO that has been released and for which the required resources are available for application within a specified time (FY). Required resources, as a minimum, include the availability of funds, kits, and manpower.

Deadlining

The act of removing an item of equipment from operation or use because it is inoperative due to damage or malfunction, is in need of repairs, is unsafe, or would be damaged by further use.

Deferred MWO

Current MWO for which application has been rescheduled because of resource diversion or shortfall, reprogramming action, or HQDA direction.

Equipment Distribution Support System

The Force Management subsystem used to establish Army priorities for equipment fielding of major end items and their modifications because of resource constraints.

Effective date (MWO)

For emergency and urgent MWO, the first day on which the MWO is authorized for application. For routine MWO, the first day of the fiscal year in which application will start or the actual date on which application is scheduled.

Force builder

The ODCSOPS system for building the structure and composition systems (SACS) output (for example, LOGSACS, PERSACS) and establishing the Army acquisition objective, the requirement for end items based upon force modernization decisions.

Hazard categories

Descriptions established to determine classification of vehicle safety recall campaigns. Categories IEmergency: Will cause death or severe injury to personnel or will cause system loss. Category IIUrgent: Will cause personnel injury or major system damage or will require immediate corrective action for personnel or system survival. Category IIIRoutine: Can be counteracted or controlled without injury to personnel or without major system damage.

Installation kit

That assemblage of hardware and software that interfaces between the modified host system and the mounted system. The installation kit is intended for removal from the host system upon disposition. It is not a permanent part of the host system.

Mandatory modification

Any permanent modification made after production to an end item. It must meet the criteria for designation as a modification and exceed the criteria for accomplishment as another type of non-mandatory modification.

Materiel developer

The research, development, and acquisition command, agency, or office assigned mission area responsibility for the system under development or being acquired. Can also refer to the specific organization assigned primary responsibility for matrix functional support to a PEO/PM.

Modification

The alteration, conversion, or modernization of an end item of investment equipment that changes or improves the original purpose or operational capacity in relation to effectiveness, efficiency, reliability, or safety of that item.

Modification kit

That assemblage of hardware and software necessary to modify the host system to accept the mounted system. The modification kit is a permanent part of the host system and remains with it.

Publication date (MWO)

The date the MWO was published or revised that appears in the upper right corner of the MWO title page.

Special mission modification

A temporary materiel change required to achieve a special mission that may be published in a TB.

Special purpose modification

Materiel change incorporating a special modification and designed to meet a specialized requirement.

Suspended MWO

A published and released mandatory MWO on which no further action will be taken in regard to application or removal of kits pending modification re-evaluation. After re-evaluation, the MWO will be either reinstated, revised, canceled, or completed.

Section III

Special Abbreviations and Terms

This section contains no entries.

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